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no. 10

Pest Alert

FOREST SERVICE—U.S. DEPARTMENT OF AGRICULTURE
IN COOPERATION WITH YOUR STATE AGENCY

Protection Report R8-PR 10 February 1988

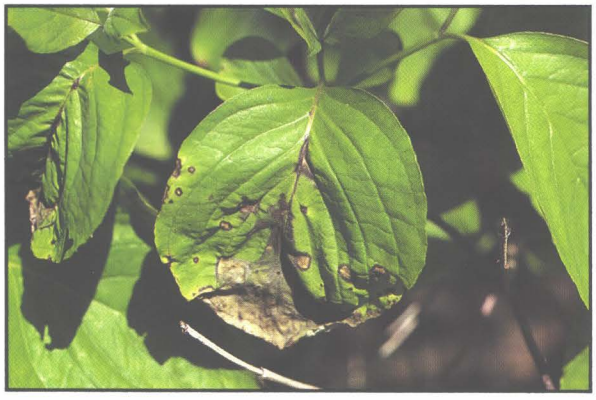
A KILLER OF DOGWOOD: DOGWOOD ANTHRACNOSE

Southern Region, 1720 Peachtree Rd., N.W., Atlanta, Ga. 30367

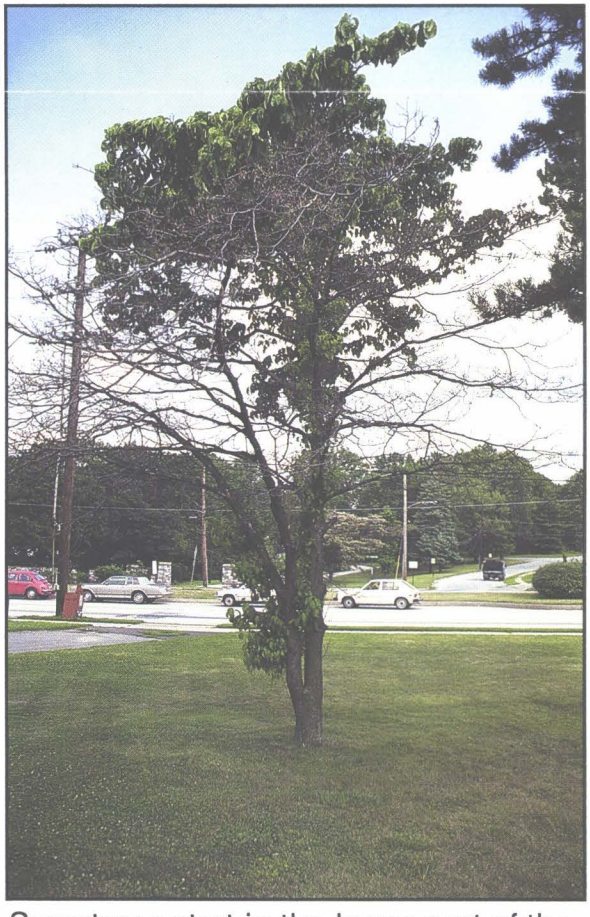
Since the late 1970's, a new disease has been causing widespread mortality of flowering dogwood. By 1986, the disease had been found in nine Northeastern States and had moved as far south as West Virginia. In 1987, it was found in northern Georgia and western North Carolina.

This disease is caused by a newly identified fungus (*Discula* sp.). Initial symptoms are small, purple-rimmed leaf spots or larger tan blotches that may enlarge to kill the entire leaf. Infected leaves often cling to stems after normal leaf fall. The fungus also can infect twigs, killing them back several inches, and in some cases to the main stem. The dead portions of twigs are tan and may be covered with orange *Discula* spores. There may be a purple border between dead and healthy twig tissues. In infected plants, numerous epicormic shoots often form up and down the main stem and on major branches. These become infected and die. When they do, the fungus often grows into the main stem, causing annual cankers.

Trees are often killed 2 to 3 years after the first attack. Weather factors may determine whether the dogwood anthracnose will lead to tree death. Other diseases, such as armillaria root rot, may accelerate dogwood mortality.



Foliage symptoms.



Symptoms start in the lower part of the tree.

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ROCKY MTN. FOREST & RANGE
EXPERIMENT STATION

Canker at the base of a shoot.

Photo: Courtesy of Dr. Craig Hibben, Brooklyn Botanic Garden Research Center.

Foliage hanging on tree in winter.

Photo: Courtesy of Dr. Robert Zahner, Clemson University.

Species affected:	Only flowering dogwood.
Age of trees:	All ages are affected.
Setting:	Forest and shade trees are equally affected.
Sequence of events:	Foliage spots, shoot mortality, new shoots, reinfection, main stem cankers, death in 2 to 3 years.

Sample for laboratory confirmation should be sent to: (Please call before sending.)

Margery Daughtrey
Cornell University
L.I. Hort. Res. Lab
39 Sound Ave.
Riverhead, NY 11901
516-727-3595

Epicormic shoot formation and mortality.

Send reports of damage to:

Robert L. Anderson
USDA Forest Service
Rt. 3, Box 1249-A
Asheville, NC 28806
704-667-5089

or

Nolan Hess
USDA Forest Service
2500 Shreveport Hwy.
Pineville, LA 71360
318-473-7160

or
Your State Forester